UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 08/02/2010

Charles E. Smith ExxonMobil Upstream Research Company P.O. Box 2189 CORP-URC-SW348

Houston, TX 77252-2189

EXAMINER NIESZ, JASON KAROL

PAPER NUMBER

ART UNIT

DATE MAILED: 08/02/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,359	05/15/2006	Mark E. Ehrhardt	2004UR032	2980

TITLE OF INVENTION: SUBSEA CRYOGENIC FLUID TRANSFER SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/02/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	or transmitting the l ng the Patent, advanc nerwise in Block 1, b	issue fee and publical e orders and notification of by (a) specifying a new corre	maintenance fees wi espondence address;	ed). Blocks I through II be mailed to the cand/or (b) indicating	urrent c a separa	orrespondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
P.O. Box 2189	stream Research Co			Cert	ificate of Mailing or	Transm	
CORP-URC-SW Houston, TX 77							(Depositor's name)
			L				(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	3	ATTORNEY DOCKET	NO.	CONFIRMATION NO.
10/579,359	05/15/2006		Mark E. Ehrhardt		2004UR032		2980
TITLE OF INVENTION	: SUBSEA CRYOGENI	C FLUID TRANSFE					
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S	B) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810		11/02/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS				
NIESZ, JASO	ON KAROL	3751	141-387000	_			
Change of correspondence address or indication of "Fee Address" (3: CFR 1.563). Change of correspondence address (or Change of Correspondence Address from PIOSB/122) altached. Tee Address' indication for "Fee Address" Indication form FIOSB/123 latached. Tee Address' indication for "Fee Address" Indication form PIOSB/127 latached. Use of a Carston Number is required. Assisted that Analysis and PIOSB/127 latached. Use of a Carston Number is required.			or agents OR, alternat (2) the name of a sing registered attorney or 2 registered patent att listed, no name will be	e annes of up to 3 registered patent attorneys 1 sins OR, alternatively, sumer of a single firm thaving as a member a 2 recred attorney or agent) and the names of up to stered patent attorneys or agents. If no name is 3 no name with be printed,			
PLEASE NOTE: Uni recordation as set forti (A) NAME OF ASSIG	ess an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assig pletion of this form is	nee data will appear on the NOT a substitute for filing ar (B) RESIDENCE: (CIT	patent. If an assigne assignment. Y and STATE OR Co	OUNTRY)		
4a. The following fee(s): Issue Fee Publication Fee (N	o small entity discount p	permitted)	4b. Payment of Fee(s): (Ple A check is enclosed. Payment by credit cs The Director is hereb overpayment, to Dep	ard. Form PTO-2038	is attached.		
	s SMALL ENTITY state	as. See 37 CFR 1.27.	☐ b. Applicant is no lo				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be acco ites Patent and Traden	epted from anyone other than nark Office.	the applicant; a regis	tered attorney or ager	it; or the	assignee or other party in
Authorized Signature				Date			
Typed or printed name				Registration No			
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	EFR 1.311. The inform U.S.C. 122 and 37 C USPTO. Time will r rden, should be sent t O NOT SEND FEES O	nation is required to obtain or FR 1.14. This collection is every depending upon the indio the Chief Information Offic OR COMPLETED FORMS T	retain a benefit by the stimated to take 12 m vidual case. Any cor- ser, U.S. Patent and 1 O THIS ADDRESS.	e public which is to fi inutes to complete, in nments on the amour rademark Office, U.S SEND TO: Commis	ile (and l ocluding it of time S. Depar sioner fo	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



Houston, TX 77252-2189

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,359	05/15/2006	Mark E. Ehrhardt	2004UR032	2980
75	90 08/02/2010	EXAMINER		
Charles E. Smith			NIESZ, JAS	ON KAROL
ExxonMobil Upstream Research Company			ART UNIT	PAPER NUMBER
P.O. Box 2189 CORP-URC-SW348		3751 DATE MAILED: 08/02/201	0	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 852 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 852 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/579,359	EHRHARDT ET AL.				
Examiner	Art Unit				
JASON K. NIESZ	3751				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to Amendment Received 07/15/2010.
- The allowed claim(s) is/are 1,6-9, 11-38,41-48,53-56,58-80,83-86,88-93,95 and 96.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - b) \(\subseteq \text{Some* c} \) \(\subseteq \text{None of the:} \) a) \square All
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)

of Biological Material

- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

Application/Control Number: 10/579,359

Art Unit: 3751

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The
combination of multiple subsea risers communicating between a first location and a
floating vessel and, a jumper conduit which forms a cooling loop between first and
second risers is not anticipated or made obvious by the prior art of record in the
examiner's opinion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON K. NIESZ whose telephone number is (571)270-3920. The examiner can normally be reached on mon-fri 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason K Niesz Examiner Art Unit 3751

/Gregory L. Huson/ Supervisory Patent Examiner, Art Unit 3751